Archeological Testing for Five Sewer Systems Delaware Water Gap National Recreation Area Monroe County, Pennsylvania and Sussex County, New Jersey

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MANAGEMENT SUMMARY

Archeological testing to evaluate the effect of proposed installation of five sewer systems was conducted within the Delaware Water Gap National Recreation Area prior to construction: Park Headquarters, Zion Lutheran Church (LCS 09523), the Giorelli House on Tract 8201 (No LCS), the Hilltop Farm Barn (LCS 09578), and the Cedzidlo House on Tract 10631-2 (No LCS). These investigations did not result in the identification of any archeological resources. The improvements had Ano effect@ on archeological resources.

INTRODUCTION

In compliance with the National Historic Preservation Act of 1966 (as amended) and the Programmatic Agreement between the National Park Service, the Advisory Council for Historic Preservation, and the National Council of State Historic Preservation Officers, the locations of five proposed sewer systems were archeologically examined by the author between August and September, 1992 to determine their effects on unknown archeological resources. Archeological investigations were conducted in accordance with the National Park Service's "Secretary's Standards for Archeology" as well as the Commonwealth of Pennsylvania's "Bureau for Historic Preservation Guidelines for Archeological Investigations." All curatorial activities were conducted in accordance with the NPS=s AMuseum Handbook.@ Shovel tests were excavated at maximum intervals of twenty-five feet throughout each project to sterile soil. All soils were passed through one-quarter inch hardware cloth. Consultation with the Pennsylvania Bureau of Historic Preservation and the New Jersey SHPO resulted in findings of Ano effect@ for all reported activities. All materials associated with this project are curated at theDelaware Water Gap National Recreation Area Accession DEWA-XXXX.

ZION LUTHERAN CHURCH

Background: Zion Church is located in Smithfield Township, Monroe County, Pennsylvania, just west of River Road (Figure 1). Constructed in 1851 and lying on a relatively steep slope between the elevations of 380 and 400 feet (some 80 feet above the Delaware River lying 1200 feet to the south and east) the park proposed rehabilitation for use as an office, requiring additional parking and installation of a sewer system (Figures 2, 3, and 4).

Soils: Zion Church is located on Lackawanna and Bath extremely stony soils (Lipscomb 1981: 33-34). These soils are described as steep and very steep, well drained soils lying on steeper sides of ridges, plateaus, and mountains. Slopes are variable and range from 25 to 70 percent. They are about 400 to more than 1200 feet long. Their areas are usually irregular in shape and normally are 5 to 65 acres in size. They are composed of about 45 percent Lackawanna soil, 25

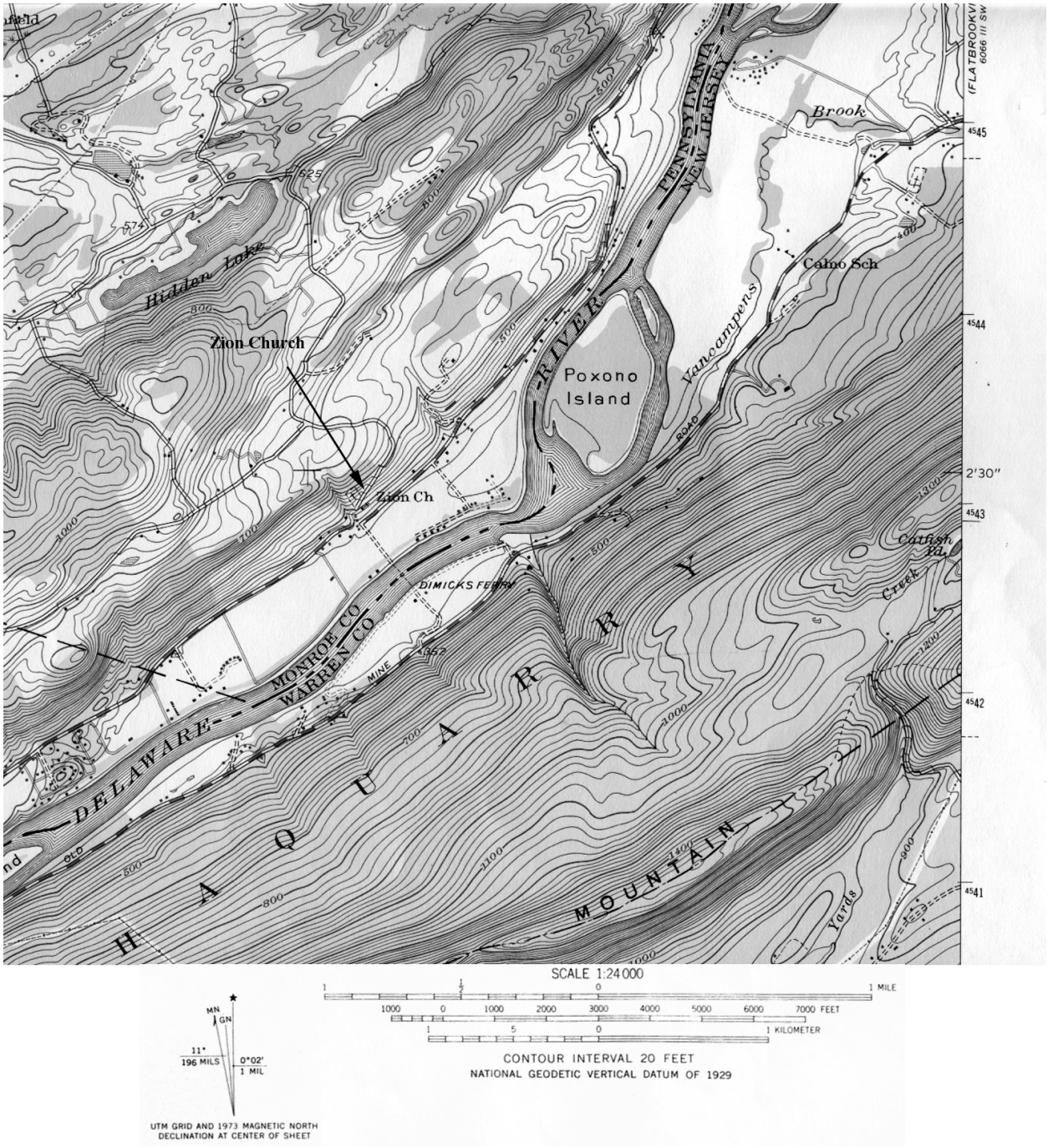

Figure 1: Location of Zion Lutheran Church. Detail from U.S.G.S. 7.7 Minute Series (Topographic) Bushkill Quadrangle 1944. Photorevised 1968 and 1973.

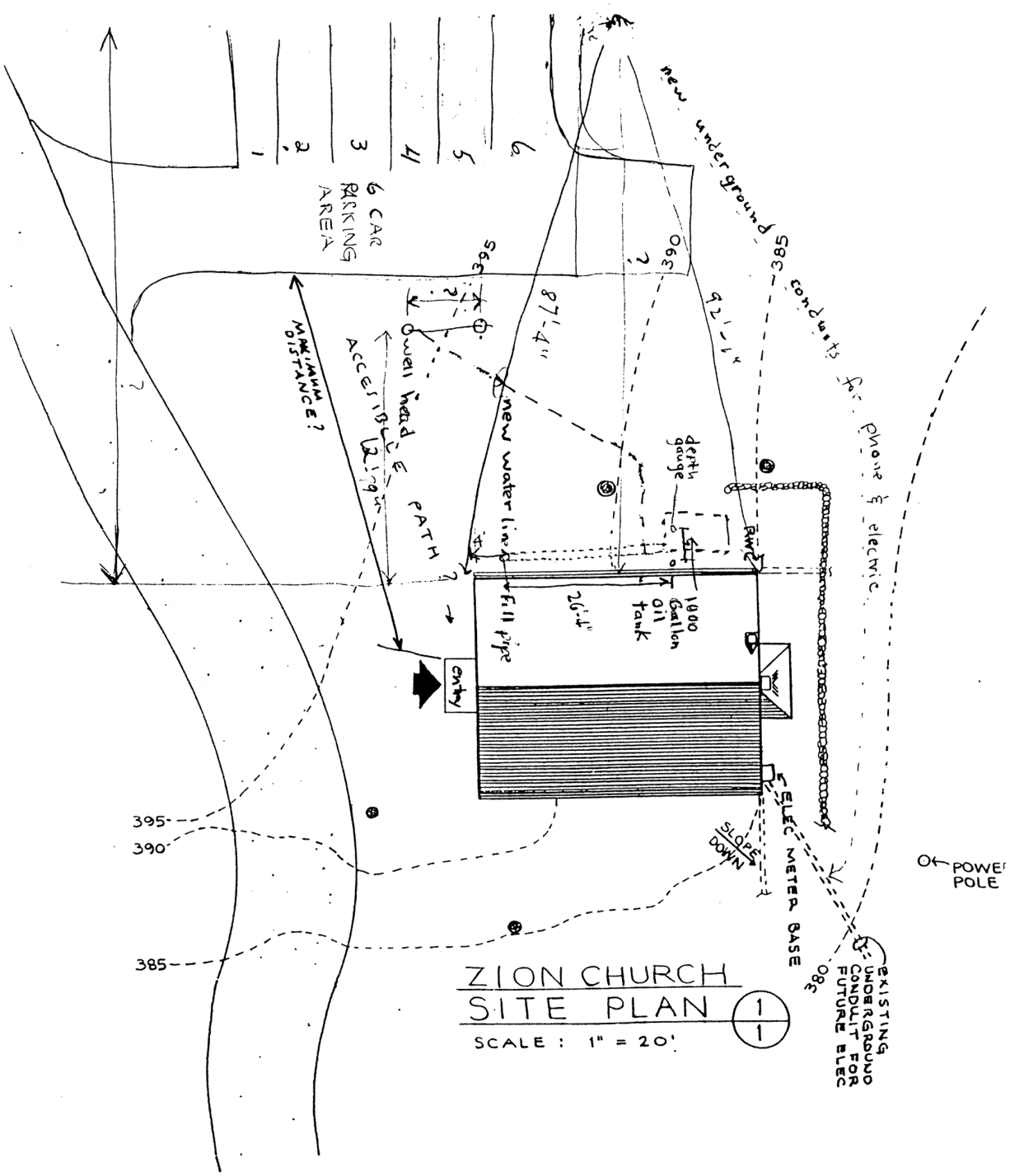

Figure 2: Construction plan showing location of archeological tests.

Figure 3: Zion Lutheran Church from northeast showing parking area to right.

Figure 4: Zion Lutheran Church from southeast showing drain field to right.

percent Bath soil, and 30 percent included soils. These soils are mapped together because they both are steep to very steep and have an extremely stony surface. Typically, the Lackawanna soil has a surface layer of pinkish gray channery loam about 1 inch thick. The subsoil is 64 inches thick. The upper part of the subsoil is strong brown and brown, friable channery loam 21 inches thick; and the lower part is a weak red, very firm and brittle channery loam fragipan 32 inches thick. Typically, the Bath soil has a surface layer of dark grayish brown channery silt loam 3 inches thick. The subsoil is 52 inches thick. The upper part of the subsoil is yellowish brown, friable channery silt loam and channery loam 23 inches thick; and the lower part is yellowish brown, firm and brittle channery loam 29 inches thick. The substratum, to a depth of 65 inches, is brown very channery loam.

Archeological Tests: Six tests were excavated in the proposed parking lot (Figure 5).

Test 1 was located 6 feet west and approximately 4 feet south of an existing utility pole on the northeast corner of the parking area. Measuring 1.3 feet wide, it had two strata:

0 - 0.8 fbs	Dark gray (Munsell color 10YR 4/1) sandy loam.
0.8 - 2.0 fbs	Brown (Munsell color 10YR 4/3) sandy friable loam/delaminating sandstone.

Test 2 was located 16 feet west of Test 1. Measuring 1.3 feet in diameter, it had two strata:

0 - 0.4 fbs	Dark gray (Munsell color 10YR 4/1) organic topsoil with dense small gravel (0.02 feet< diameter).
0.4 - 0.9 fbs	Brown (Munsell color 10YR 4/3) sandy friable loam with dense rotting tabular sandstone and large (>0.4 feet diameter) stones.

Test 3 was located 16 feet west of Test 2. Measuring 1.3 feet in diameter, its stratigraphy was identical to Test 2:

0 - 0.4 fbs	Dark gray (Munsell color 10YR 4/1) organic topsoil with dense small gravel (<0.02 feet diameter).
0.4 - 0.9 fbs	Brown (Munsell color 10YR 4/3) sandy friable loam with dense rotting tabular sandstone and large (>0.4 feet diameter) stones.

Test 4 was located 22 feet south of Test 1. Measuring 1.2 feet in diameter, it had three strata:

0 - 0.7 fbs	Dark gray (Munsell color 10YR 4/1) sandy loam containing a single fragment of clear vessel glass
0.7 - 1.6 fbs	Dark grayish brown (Munsell color 10YR 4/2) sandy friable loam.
1.6 - 2.0 fbs	Brown (Munsell color 10YR 4/3) friable loam with rotting sandstone.

Test 5 was located 16 feet west of Test 4. It had four strata:

0 - 0.4 fbs	Dark gray (Munsell color 10YR 4/1) organic sandy topsoil.
0.4 - 0.95 fbs	Brown (Munsell color 10YR 4/3) friable loam with sandstone fragments.
0.95 - 2.0 fbs	Organic loam topsoil which probably represents a buried A horizon

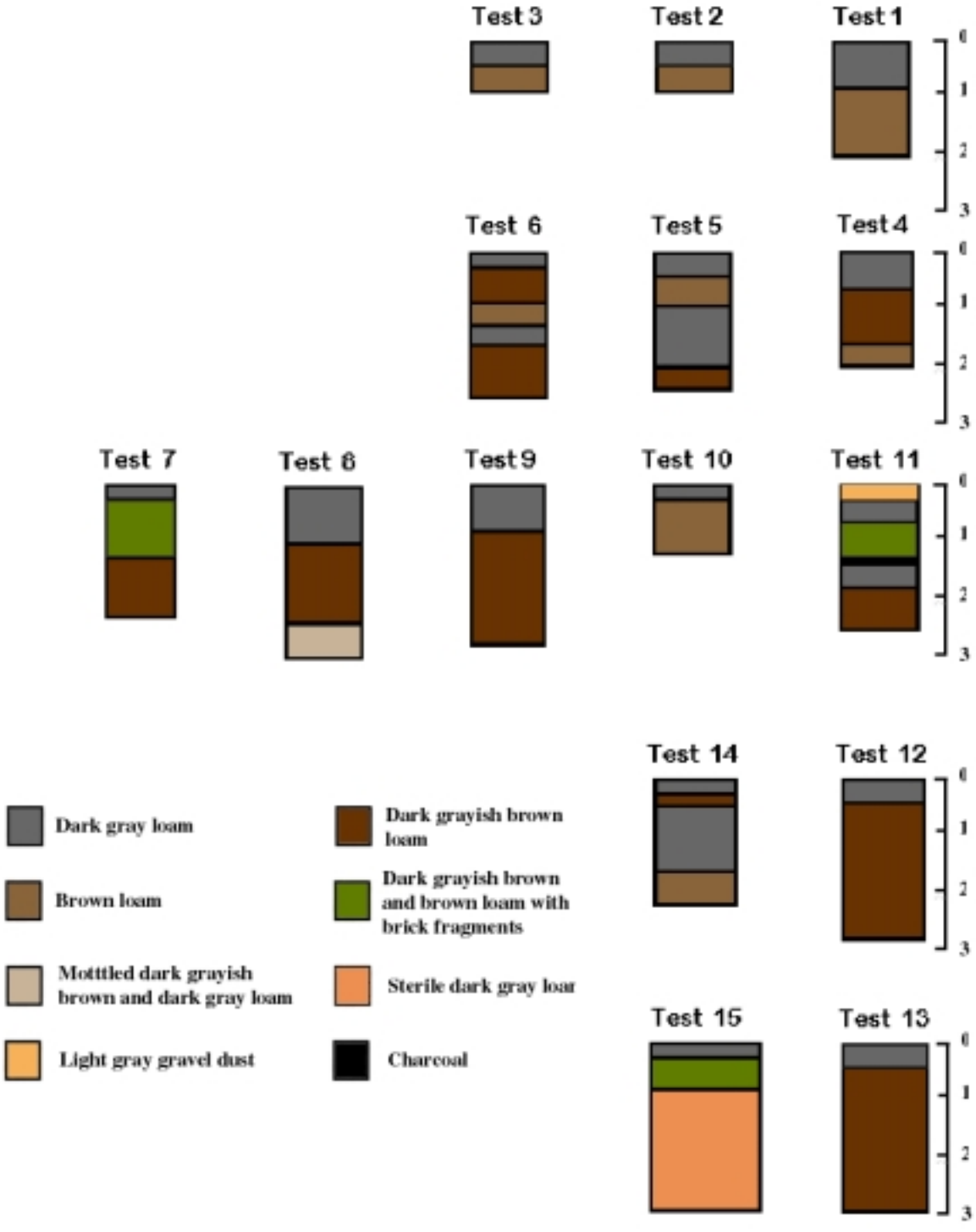

Figure 5: North profiles of archeological tests, Zion Lutheran Church.

resulting from construction of Zion Church).

2.0 - 2.4 fbs Dark grayish brown (Munsell color 10YR 4/2) friable loam

Test 6 was located on the southwestern edge of the parking lot. Measuring 1.3 feet in diameter, the test had five strata:

0 - 0.3 fbs Dark gray (Munsell color 10YR 4/1) organic topsoil.
0.3 - 0.9 fbs Dark grayish brown (Munsell color 10YR 4/2) friable loam.
0.9 - 1.3 fbs Brown (Munsell color 10YR 4/3) friable loam.
1.3 - 1.6 fbs Dark gray (Munsell color 10YR 4/1) organic topsoil.
1.6 - 2.5fbs Dark grayish brown (Munsell color 10YR 4/2) friable loam.

No artifacts were recovered from Test 6. The complex stratigraphy identified in Tests 5 and 6 is associated with the grading for construction of Zion Church.

Test 7 was excavated to assess the effect of a proposed underground utility line between an existing utility pole to the northeast corner of Zion Church. Located 57 feet north of the northeast corner of Zion Church, Test 7 measured 1.2 feet in diameter and had three strata:

0 - 0.3 fbs Dark gray (Munsell color 10YR 4/1) organic topsoil.
0.3 - 1.3 fbs Mixed dark grayish brown (Munsell color 10YR 4/2) and brown (Munsell color 10YR 4/3) compact sandy loam with small (0.02< feet diameter) stones and several brick fragments.
1.3 - 2.3 fbs Dark grayish brown (Munsell color 10YR 4/2) friable loam.

Excavation was suspended due to rotting sandstone in the bottom of the test at 2.3 fbs.

Seven tests were excavated in the area for the proposed sewer system. The system exits the northeast corner of the church and continues down a relatively steep slope to the kame terrace lying at an elevation of approximately 420 feet.

Test 8 was located 32 feet from the northeast corner of Zion Church off of the retaining wall. Measuring 1.3 feet in diameter, it had three strata:

0 - 1.0 fbs Dark gray (Munsell color 10YR 4/1) organic topsoil.
1.0 to 2.4 fbs Dark grayish brown (Munsell color 10YR 4/2) loam.
2.4 - 3.0 fbs Mottled dark grayish brown (Munsell color 10YR 4/2) and dark gray (Munsell color 10YR 4/1) loam. This appeared to be the result of root tracks, not a buried A horizon.

Test 9 was located halfway between a power pole and Test 8. Measuring 1.3 feet in diameter, it had two strata:

0 - 0.8 fbs Dark gray (Munsell color 10YR 4/1) organic topsoil.
0.8 to 2.8 fbs Dark grayish brown (Munsell color 10YR 4/2) friable loam. This is probably colluvium as this test was located on a pronounced slope.

Test 10 was located 30 feet east of the Zion Church chimney. Excavated only to the depth of 1.2 feet, the unit had two strata:

0 - 0.3 fbs	Organic humic topsoil containing a large brick fragment (not collected) and medium-sized (between 0.3 and 0.5 feet diameter) rounded stones which are possibly river cobbles.
0.3 - 1.2 fbs	Brown (Munsell color 10YR 4/3) friable loam containing dense, interlocked cobbles, rotting shale, and tabular sandstone fragments.

Test 11 was located 21 feet south of the southeast corner of Zion Church. It has a rather complex stratigraphy consisting of six strata:

0 - 0.3 fbs	Small (0.01<feet diameter) gravel with a matrix of light gray (Munsell color 10 YR 7/1) gravel dust.
0.3 - 0.7 fbs	Dark gray (Munsell color 10YR 4/1) organic topsoil with larger gravel (0.02< fbs diameter).
0.7 - 1.3 fbs	Compacted loam with tabular sandstone and small brick fragments which represents a fill layer.
1.3 - 1.4 fbs	Black (Munsell color 10YR 2/1) charcoal across the entire unit.
1.4- 1.8 fbs	Organic humic topsoil with small brick fragments.
1.8 to 2.5 fbs	Dark grayish brown (Munsell color 10YR 4/2) friable loam.

Test 12 was located at the northeast corner of the septic field. Measuring 1.4feet in diameter, it had two strata:

0 - 0.4 fbs	Dark gray (Munsell color 10YR 4/1) humic topsoil.
0.4 - 2.8 fbs	Dark grayish brown (Munsell color 10YR 4/2) friable loam.

Test 13 was located 20' feet east of Test 12, at the southeast corner of the septic field. Measuring 1.3 feet in diameter, it had two strata:

0 - 0.4 fbs	Dark gray (Munsell color 10YR 4/1) humic topsoil.
0.4 - 2.9 fbs	Dark grayish brown (Munsell color 10YR 4/2) friable loam.

Test 14 was located at the northwest corner of the septic field. Measuring 1.4 feet in diameter the test displayed four strata:

0 - 0.3 feet	Dark gray (Munsell color 10YR 4/1) organic topsoil.
0.3 - 0.5 fbs	Dark grayish brown (Munsell color 10YR 4/2) friable loam containing an iron object of unidentifiable function.
0.5 - 1.6 fbs	Dark gray (Munsell color 10YR 4/1) organic topsoil containing a wire nail.
1.6 - 2.2 fbs	Brown (Munsell color 10YR 4/3) friable loam subsoil.

Test 15 was located at the southwest corner of the septic field. Measuring 1.9 feet in diameter, the test displayed three strata:

0 - 0.3 fbs	Dark gray (Munsell color 10YR 4/1) organic topsoil.

0.3 to 0.8 fbs Dark gray (Munsell color 10YR 4/1) topsoil mixed with dark grayish brown (Munsell color 10YR 4/2) friable loam mixed with pea-sized gravel.

0.8 - 2.9 fbs Dark gray (Munsell color 10YR 4/1) friable loam.

Summary: Excavation of fifteen tests within the proposed locations of improvements at Zion Church did not identify any significant archeological resources. Evidence of grading activities associated with construction were identified in Tests 5, 6, and 11. These, however, did not contain any artifacts that would allow for reinterpretation of the site=s function or date of construction. Soil profiles were consistent with Bath and Lackawanna soils except where colluvial deposition occurred (Tests 9 and 10) on steep slopes. No evidence of prehistoric occupation was identified. Construction of the proposed parking and sewer improvements had Ano effect@ on archeological resources.

PARK HEADQUARTERS

Background: The Park Headquarters is located in Smithfield Township, in a saddle between two low ridges (Figure 6). Replacement of an existing sewer system required construction of a drain field measuring approximately 100 feet north/south by 20 feet east/west. The location has no known historical resources.

Soils: Soils in the proposed location of the drain field consist of the Benson-Rock outcrop complex, 25 to 70 percent slopes. This complex of shallow, steep and very steep, well drained soils and Rock outcrop is on steeper sides of ridges. Slopes are complex and are about 350 to 1,200 feet long. Areas are usually long and narrow in shape and are normally 10 to 120 acres in size.

This complex consists of about 60 percent Benson soil, 25 percent Rock outcrop, and 15 percent included soils. Benson soils and Rock outcrop are mapped together because they occur in such intricate patterns that it is not practical to separate them at the scale of mapping. In most of the area, Benson soils have an extremely stony surface layer ; however in about 25 percent of the area, the stones have been removed from the surface.

Typically, the Benson soil has a surface layer of brown channery silt loam about 8 inches thick. The upper part is yellowish brown, friable shaly silt loam 4 inches thick; and the lower part is yellowish brown, friable very shaly silt loam 4 inches thick. Moderately calcareous, fine grained sandstone bedrock is at a depth of 16 inches. Rock outcrop consists of exposures of solid bedrock

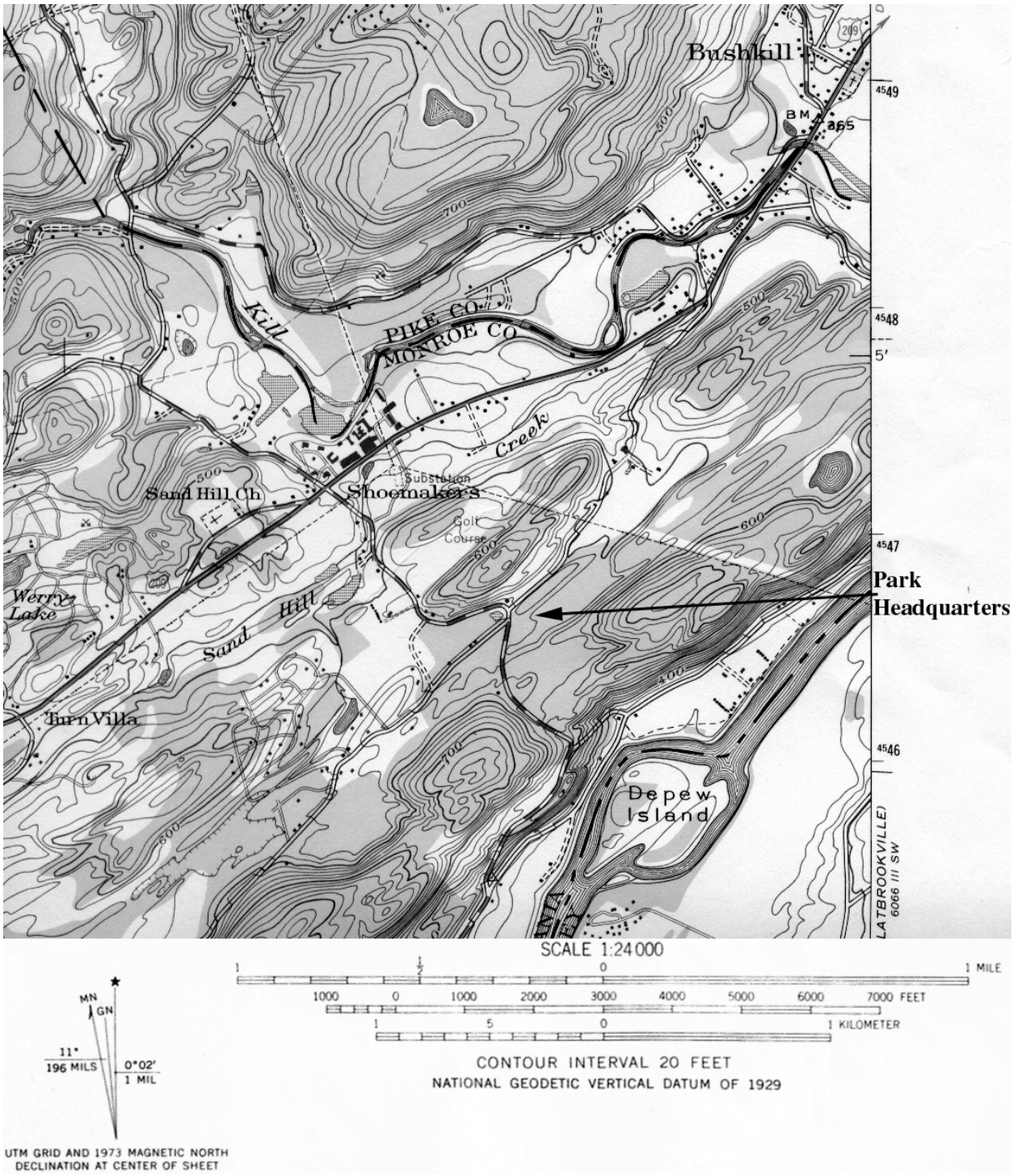

Figure 6: Location of Park Headquarters. Detail from U.S.G.S. 7.5 Minute Series (Topographic) Bushkill Quadrangle 1944. Photorevised 1968 and 1973.

Archeological Tests:. Six shovel tests were excavated at twenty-five foot intervals within the proposed impact area (Figures 7 and 8).

Test 1 was located at the southeast corner of the proposed drain field. Measuring 1.4 feet in diameter it had four strata:

0 - 0.3 fbs	Dark grey brown humic loam with medium-sized (.25 to 0.5 ft. dia. sandstone fragments.
0.3 - 0.6 fbs	Mottled dark grey brown and yellowish orange humic loam.
0.6 - 1.3 fbs	Orangish yellow silt loam.
1.3 - 1.5 fbs	Dense orangish yellow silt loam.

Test 2 was located at the southwest corner of the proposed drain field. Measuring 1.4 feet in diameter it had three strata:

0 - 0.3 fbs	Dark grey brown humic loam with medium-sized (.25 to 0.5 feet diameter) sandstone fragments.
0.3 - 0.8 fbs	Mottled dark grey brown and yellowish orange humic loam.
0.8 - 1.3 fbs	Orangish yellow silt loam.

This test was suspended at 1.3 feet because of a large stone.

Test 3 was located at the midpoint of the eastern margin of the proposed drain field. Measuring 1.4 feet in diameter it had three strata:

0 - 0.1 fbs	Dark grey brown humic loam with medium-sized (.25 to 0.5 feet diameter) sandstone fragments.
0.3 - 0.5 fbs	Orangish yellow silt loam.
0.5 - 0.7 fbs	Orangish yellow dense silt loam.

Test 4 was located at the midpoint of the western margin of the proposed drain field. Measuring 1.4 feet in diameter it had four strata:

0 - 0.3 fbs	Dark grey brown humic loam with medium-sized (.25 to 0.5 feet diameter) sandstone fragments.
0.3 - 0.6 fbs	Mottled dark grey brown and yellowish orange humic silt loam.
0.6 - 1.5 fbs	Orangish yellow silt loam
1.5 - 1.6 fbs	Orangish yellow dense silt loam.

Test 5 was located at the northeast corner of the proposed drain field. Measuring 1.4 feet in diameter it had four strata:

0 - 0.2 fbs	Dark grey brown humic loam with medium-sized (.25 to 0.5 feet diameter) sandstone fragments.
0.2 - 0.6 fbs	Mottled dark grey brown and yellowish orange humic silt loam.
0.6 - 1.3 fbs	Orangish yellow silt loam.
1.3 - 1.5 fbs	Orangish yellow dense silt loam.

Figure 7: Photograph of completed Park Headquarters sewer system looking north.

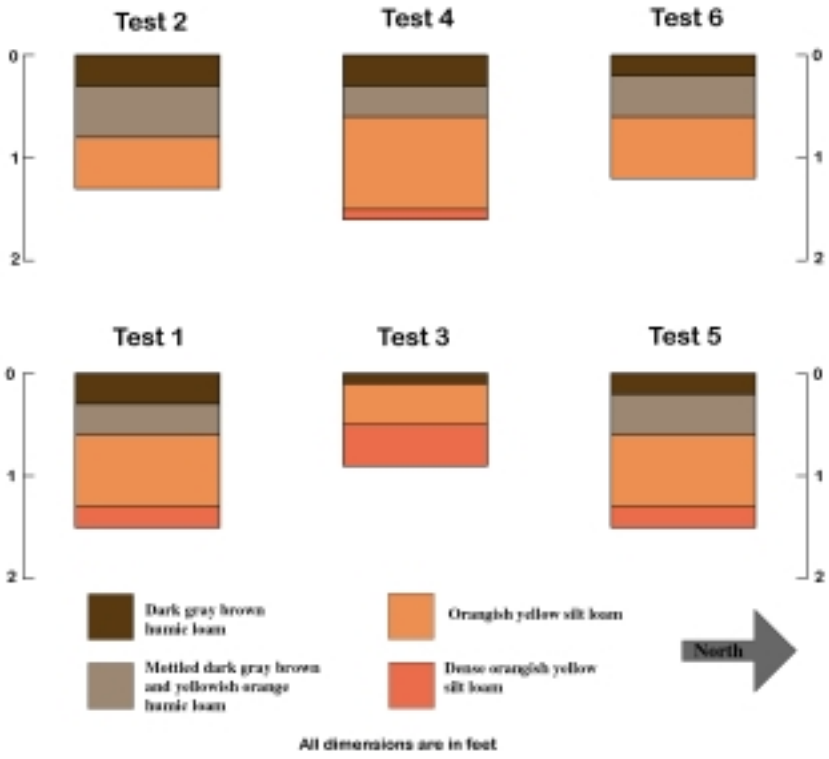

Figure 8: Profiles of test units, Park Headquarters.

Test 6 was located at the northwest corner of the proposed drain field. Measuring 1.4 feet in diameter it had three strata:

0 - 0.2 fbs Dark gray brown humic loam with medium-sized (.25 to 0.5 feet diameter) sandstone fragments.
0.2 - 0.6 fbs Mottled dark gray brown and yellowish orange humic silt loam.
0.6 - 1.2 fbs Orangish yellow silt loam.

The test was suspended at 1.2 feet because of a large stone.

Summary: Six tests at the proposed location of the new drain field at the Park Headquarters did not identify any archeological resources. No artifacts were recovered. Soil profiles were consistent with the Benson Rock Outcrop complex. Construction of the project had Ano effect@ on archeological resources.

CEDZIDLO HOUSE

Background: The Cedzidlo tract is located in Sandystone Township, Monroe County, New Jersey. It borders Old Mine Road, one-quarter mile north of its intersection with Ridge Road in New Jersey (Figure 9). It lies within the Minisink National Historic Landmark District, as well as adjacent to the Old Mine Road Historic District but does not contribute to either (Figure 9). Lying at an elevation between 460 and 480 feet (some 100 feet above the Delaware River), it occupies a high terrace which abruptly terminates approximately 200 feet to the east, rising to 600 feet. The tract contains a 1 2 story dwelling which was erected in 1957, now used for park housing. The park proposed installation of a drain field measuring 50 by 75 feet adjacent to Old Mine Road (Figures 10 and 11).

Soils: Soils at the Cedzidlo House are Colonie loamy fine sand. In a representative profile the plow layer is dark grayish-brown loamy fine sand 8 inches thick. The subsoil is brown, dark-brown and reddish brown loamy fine sand and fine sand 57 inches thick. The substratum to a depth of 80 inches is grayish-brown sand (Fletcher 1975: 14).

Archeological Tests: Eleven shovel tests and two excavation units were excavated in the proposed construction area (Figure 12):

Test 1 measured 2.0 feet in diameter and had four strata:

0 - 0.2fbs Dark gray brown humic sandy loam.
0.2 - 1.9fbs Yellow brown sandy loam.
1.9 - 2.1fbs Very dark gray brown humic sandy loam.
2.1 - 3.0fbs Yellow brown sand.

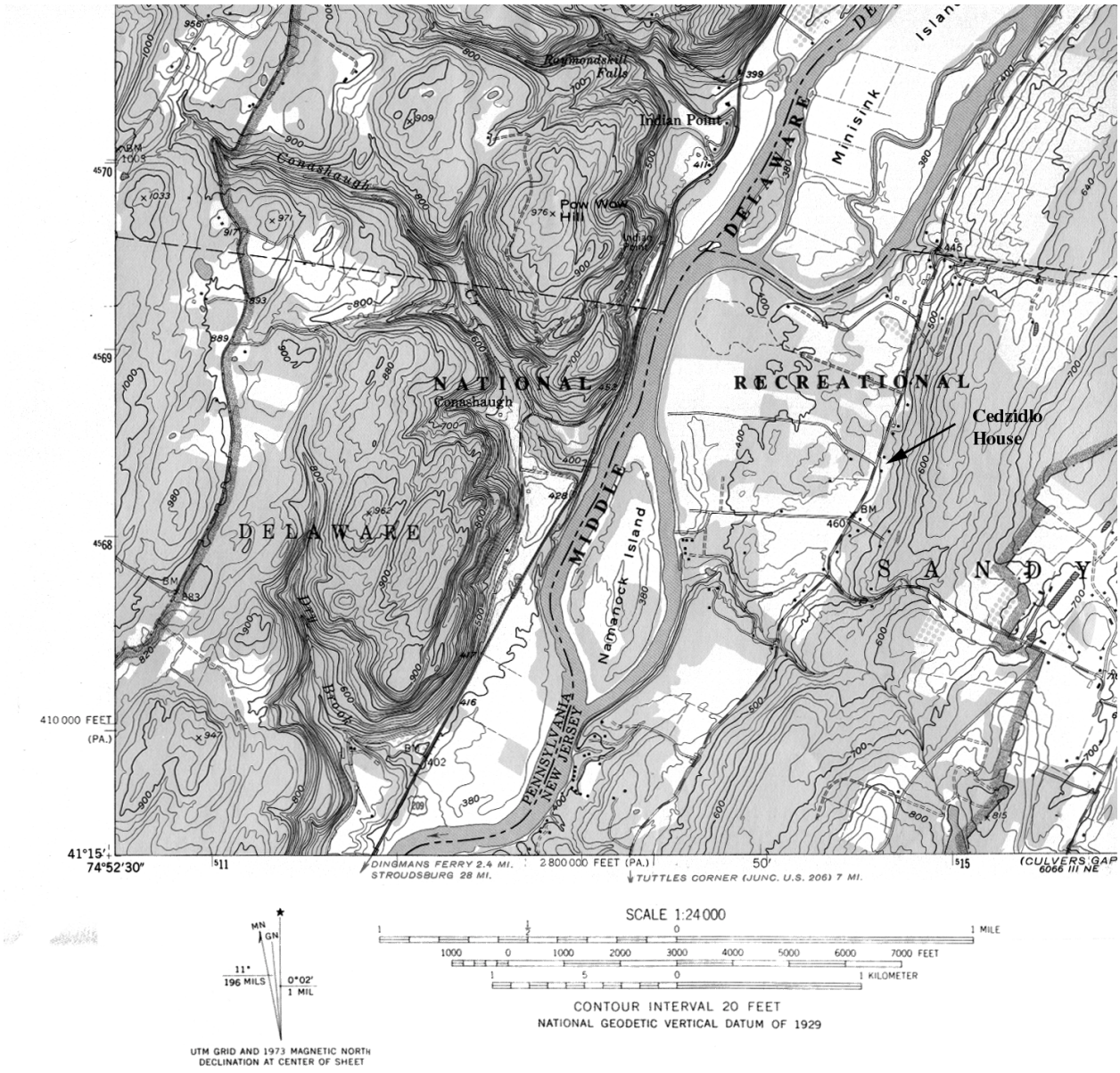

Figure 9: Location of Cedzidlo House. Detail from U.S.G.S. 7.5 Minute Series (Topographic) Milford Quadrangle 1958. Photorevised 1983.

Figure 10: Photograph of Cedzidlo House completed sewer system. Old Mine road in foreground.

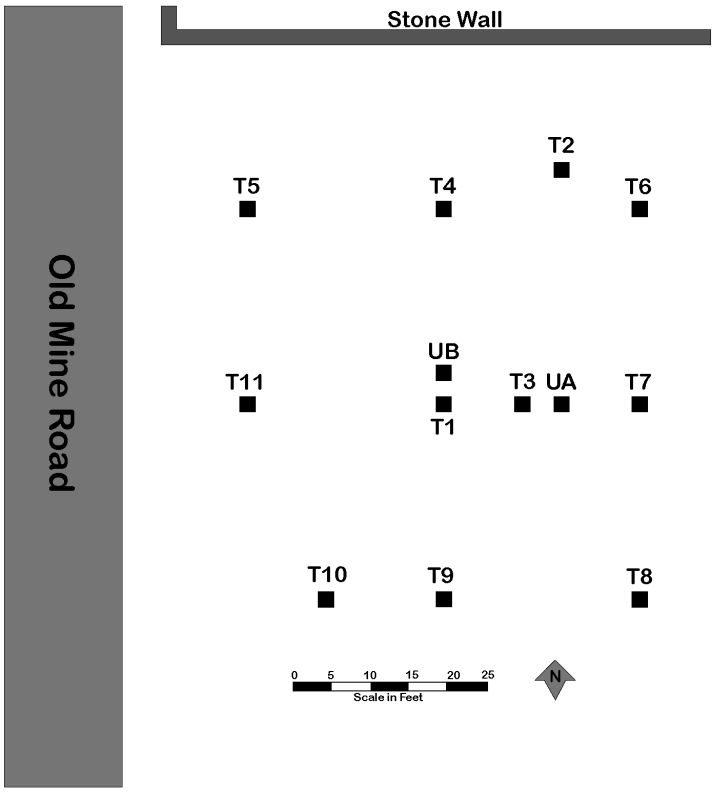

Figure 11: Location of archeological tests at the Cedzidlo House.

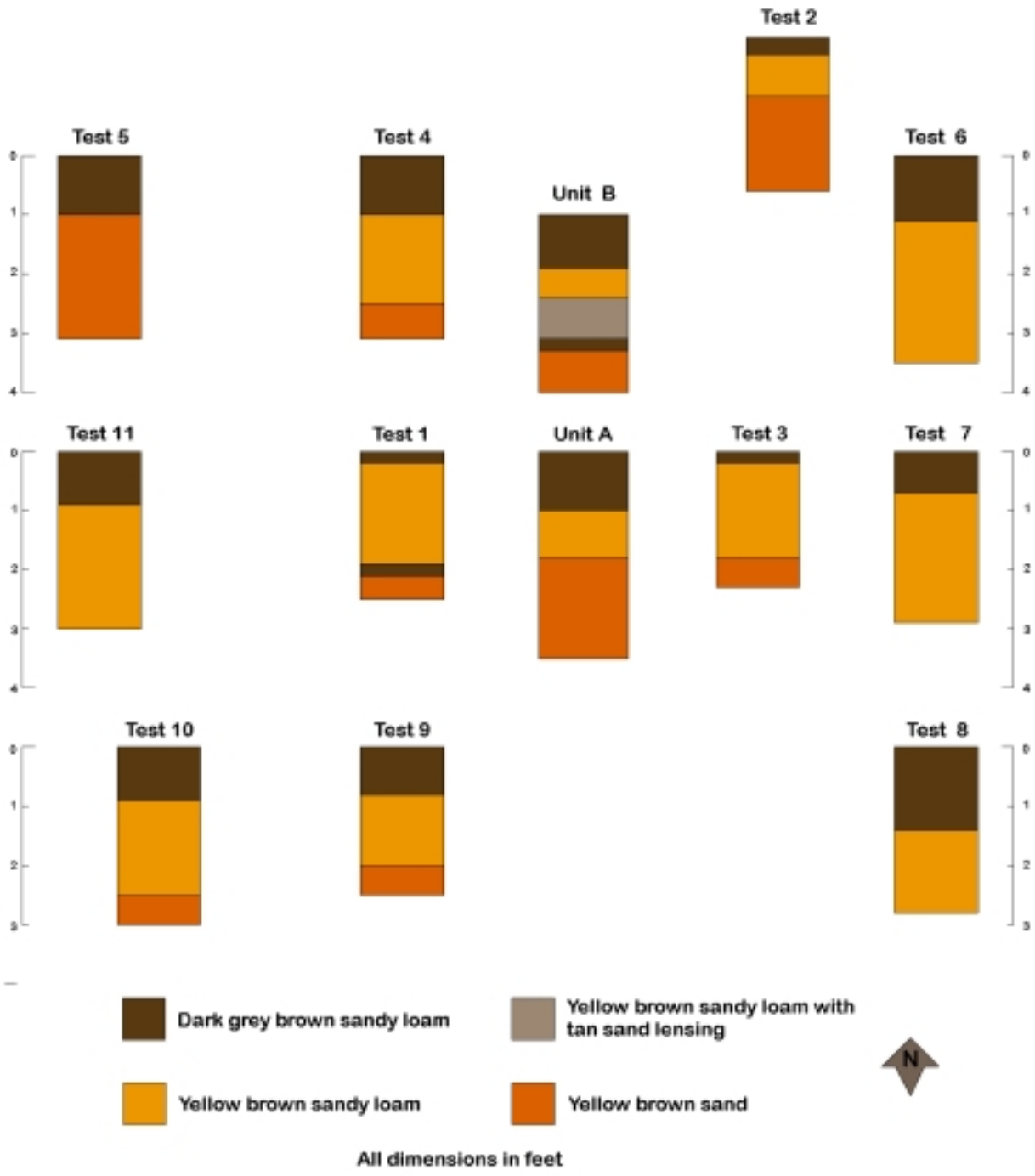

Figure 12: Profiles of archeological tests, Cedzidlo House.

Test 2 measured 2.0 feet in diamter and had three strata:

0 - 0.25fbs	Dark gray brown humic sandy loam.
0.25 - 1.0fbs	Yellow brown sandy loam.
1.0 - 2.6fbs	Yellow brown sand.

Test 3 measured 2.0 feet in diamter and had three strata:

0 - 0.2fbs	Dark gray brown humic sandy loam.
0.2 - 1.8fbs	Yellow brown sandy loam.
1.8 - 2.3fbs	Yellow brown sand.

Test 4 measured 2.0 feet in diamter and had three strata:

0 - 1.0fbs	Dark gray brown humic sandy loam.
1.0 - 2.5fbs	Yellow brown sandy loam.
2.5 - 3.1fbs	Yellow brown sand.

Test 5 measured 2.0 feet in diamter and had two strata:

0 - 1.0fbs	Very dark gray brown humic sandy loam. It contained angular stone blocks from nearby road construction.
1.0 - 3.1fbs	Yellow brown sand.

Test 6 measured 2.0 feet in diamter and had two strata:

0 - 1.1fbs	Very dark gray brown humic sandy loam.
1.1 - 3.5fbs	Yellow brown sand.

Test 7 measured 2.0 feet in diamter and had two strata:

0 - 0.7fbs	Very dark gray brown humic sandy loam.
0.7 - 2.9fbs	Reddish brown sandy loam.

Test 8 measured 2.0 feet in diamter and had three strata:

0 - 1.4fbs	Very dark gray brown humic sandy loam.
1.4 - 2.8fbs	Yellow brown sandy loam.
2.8 - 3.2fbs	Yellow brown sand.

Test 9 measured 2.0 feet in diameter and had three strata:

0 - 0.8fbs	Gray brown humic sandy loam.
0.8 - 2.0fbs	Compact yellowish brown sandy loam.
2.0 - 2.5fbs	Loose yellowish brown sand.

Test 10 measured 2.0 feet in diameter and had three strata:

0 - 0.9fbs	Dark gray brown humic sandy loam.
0.9 - 2.5fbs	Yellowish brown sandy loam with non-cultural blocks of chert
2.5 - 3.0fbs	Yellowish brown sand.

Test 11 measured 2.0 feet in diameter and had two strata:

0 - 0.9fbs	Dark gray brown humic sandy loam.
0.9 - 3.0fbs	Yellowish brown sand.

Test Unit A measured 1.5 feet square and had three strata:

0 - 1.0fbs	Very dark gray brown humic sandy loam. It contained a single fragment of flat window glass.
1.0 - 1.8fbs	Yellow brown sandy loam.
1.8 - 3.5fbs	Yellow brown sand.

Test Unit B measured 1.5 feet in diameter and had five strata similar to the adjacent Test 1:

0 - 0.9fbs	Very dark gray brown humic sandy loam.
0.9 - 1.4fbs	Yellow brown sandy loam.
1.4 - 2.1fbs	Yellow brown sandy loam with tan sand lensing.
2.1 - 2.3fbs	Very dark gray brown humic sandy loam.
2.3 - 3.0fbs	Yellow brown sand.

Summary: Excavation of eleven archeological tests and two excavation units did not identify any archeological resources. Soil profiles were consistent with Colonie loamy fine sand. Construction of the sewer system had Ano effect@ on archeological resources.

HILLTOP BARN

The Hilltop Barn (LCS 09578) lies within the Peters Valley National Register District, 0.2 miles west of Old Mine Road (Figure 13). The farmstead is one of the earliest in the area, established around 1760, while the barn dates from around 1850. The park proposed a septic field measuring 50 by 35 feet (Figure 14).

Soils: The soils at the Hilltop Barn are Wooster loam, 8 to 15 percent slopes. In a representative profile the plow layer is dark grayish brown loam 8 inches thick. The upper 14 inches of the subsoil is yellowish-brown silt loam. The next ten inches is dark yellowish-brown gravelly silt loam. The lower 16 inches is a fragipan of very firm, dark-brown channery loam. The substratum to a depth of 60 inches is yellowish-brown channery sandy loam (Fletcher 1975:37).

Archeological Testing: Six archeological tests were excavated in the proposed location of the drain field. (Figure 15). The results of those operations were:

Test 1 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam.
0.3 - 0.6fbs	Mottled gray brown and yellow gray silt loam.
0.6 - 1.4fbs	Yellow brown silt loam..
1.4 - 1.6fbs	Yellow silt loam.

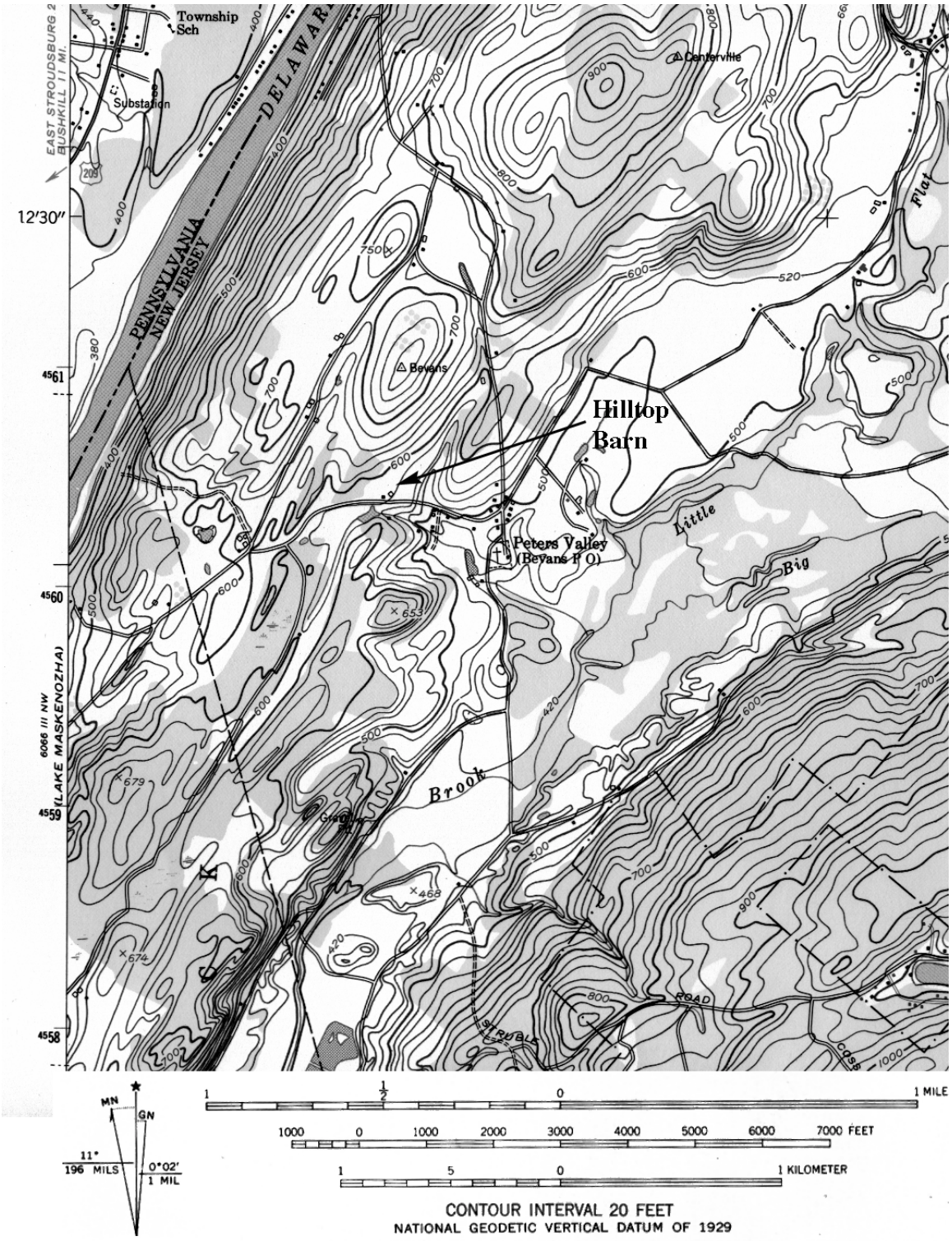

Figure 13: Location of Hilltop Barn. Detail from U.S.G.S. 7.5 Minute Series (Topographic) Culvers Gap, N.J. -PA Quadrangle 1954. Photorevised 1971 Photoinspected 1976.

Figure 14: Photograph of completed sewer system, Hilltop Barn.

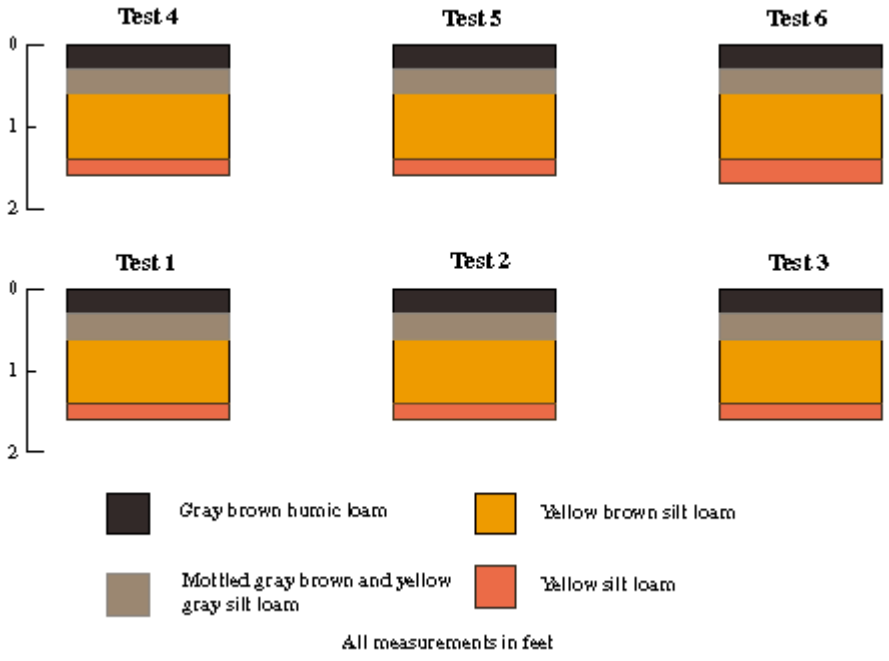

Figure 15: North profiles of archeological tests, Hilltop Barn.

Test 2 measured 2.0 feet in daimeter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained a heat-treated flake.
0.3 - 0.6fbs	Mottled gray brown and yellow gray silt loam.
0.6 - 1.4fbs	Yellow brown silt loam..
1.4 - 1.6fbs	Yellow silt loam.

Test 3 measured 2.0 feet in daimeter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained modern artifacts including wire nails and glass which were discarded.
0.3 - 0.6fbs	Mottled gray brown and yellow gray silt loam..
0.6 - 1.4fbs	Yellow brown silt loam.
1.4 - 1.6fbs	Yellow silt loam.

Test 4 measured 2.0 feet in daimeter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained modern artifacts (discarded).
0.3 - 0.6fbs	Mottled gray brown and yellow gray silt loam.
1.4 - 1.6fbs	Yellow silt loam.

Test 5 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam.
0.3 - 0.6fbs	Mottled gray brown and yellow gray silt loam..
0.6 - 1.4fbs	Yellow brown silt loam..
1.4 - 1.6fbs	Yellow silt loam..

Test 6 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam.
0.3 - 0.6fbs	Mottled gray brown and yellow gray silt loam..
0.6 - 1.7fbs	Yellow brown silt loam.
1.7 - 2.0fbs	Pale yellow silt loam.

The six shovel tests excavated in the proposed location of the new sewer system did not identify any significant archeological resources. A number of modern artifacts were recovered immediately beneath the surface, attesting to the area=s occasional use as an overflow parking area for events at Peter=s Valley. Soil profiles were consistent with Wooster loam soils. The proposed project had Ano effect@ on archeological resources.

GIORELLI HOUSE

The Giorelli House is located in Wallpack Center, but outside of the Wallpack Center Historic District (Figure 16). The structure is currently occupied by the Wallpack Environmental Education Center. The proposed drain field measured 21 by 62 feet (Figure 17)

Soils: Wallpack Center lies on Chenango gravelly fine silt loam, 3 to 8 percent slopes. In a representative profile the plow layer is dark-brown gravelly fine sandy loam 9 inches thick. The subsoil is dark yellowish-brown gravelly sandy loam sand 27 inches thick. The substratum to a depth of 70 inches is dark-brown and grayish-brown, loose very gravelly sandy loam (Fletcher 1975:12).

Archeological Testing: Six archeological tests were excavated within the proposed location of the drain field (Figure 18):

Test 1 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam.
0.3 - 0.7fbs	Yellow brown sandy loam with small (.25'<) water worn pebbles.
0.7 - 1.6fbs	Yellow brown sandy loam with fine (.1'<) water worn pebbles.
1.6 - 2.0fbs	Coarse yellow brown sandy loam with fine (.1'<) water worn pebbles.

Test 2 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained four fragments of modern light green glass which were discarded.
0.3 - 0.7fbs	Yellow brown sandy loam with small (.25'<) water worn pebbles.
0.7 - 1.6fbs	Yellow brown sandy loam with fine (.1'<) water worn pebbles.
1.6 - 2.1fbs	Coarse yellow brown sandy loam with fine (.1'<) water worn pebbles.

Test 3 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained a fragment of nineteenth century crockery.
0.3 - 0.7fbs	Yellow brown sandy loam with small (.25'<) water worn pebbles.
0.7 - 1.6fbs	Yellow brown sandy loam with fine (.1'<) water worn pebbles.
1.6 - 2.3fbs	Coarse yellow brown sandy loam with fine (.1'<) water worn pebbles.

Test 4 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained a fragment of domestic porcelain and a fragment of clear glass.
0.3 - 0.7fbs	Yellow brown sandy loam with small (.25'<) water worn pebbles.
0.7 - 1.6fbs	Yellow brown sandy loam with fine (.1'<) water worn pebbles.
1.6 - 2.2fbs	Coarse yellow brown sandy loam with fine (.1'<) water worn pebbles.

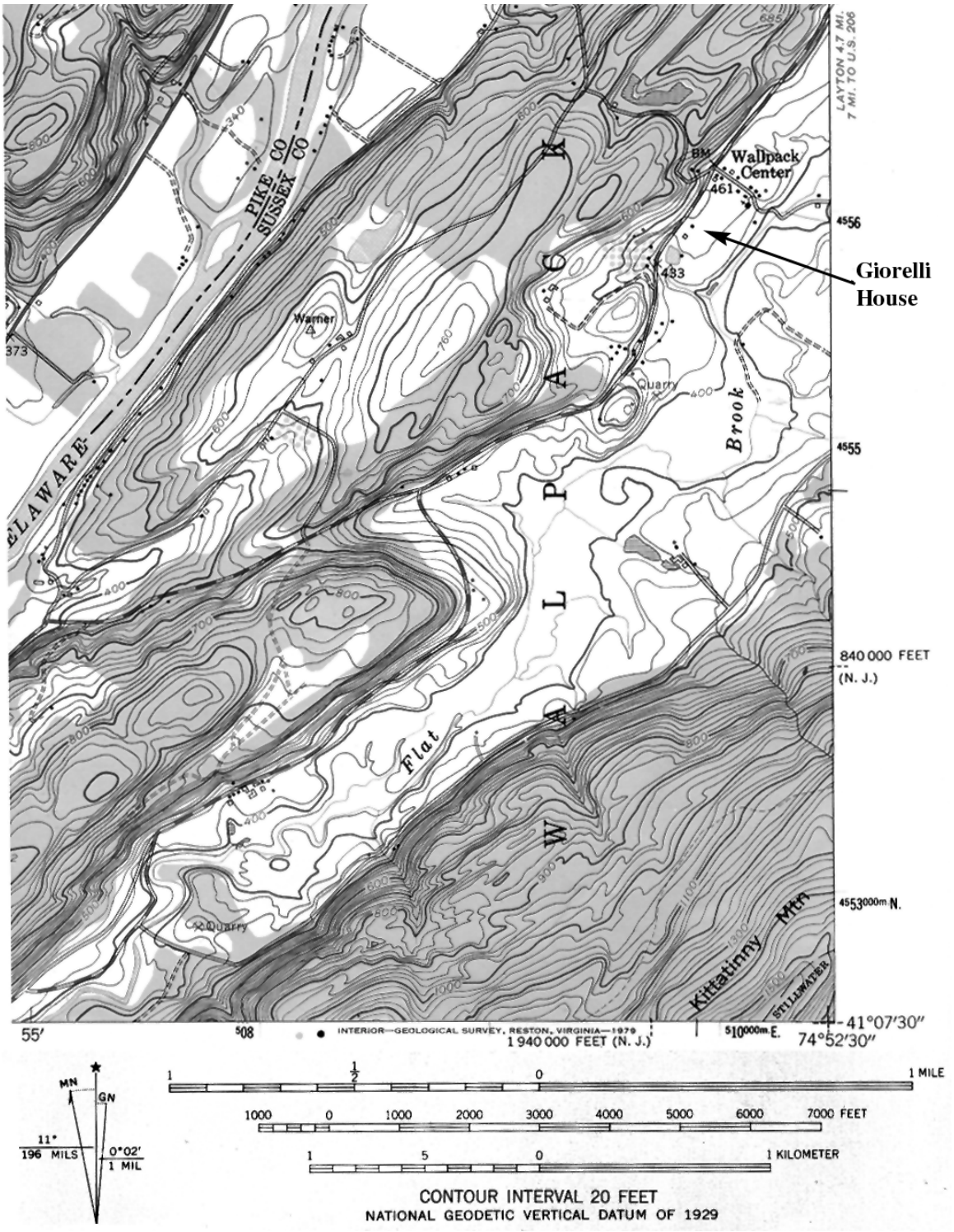

Figure 16: Location of Giorelli House. Detail from U.S.G.S. 7.5 Minute Series (Topographic) Lake Maskenozha PA -N.J. Quadrangle 1954. Photorevised 1969 and 1973.

Figure 17: Photograph of completed sewer system, Giorelli House.

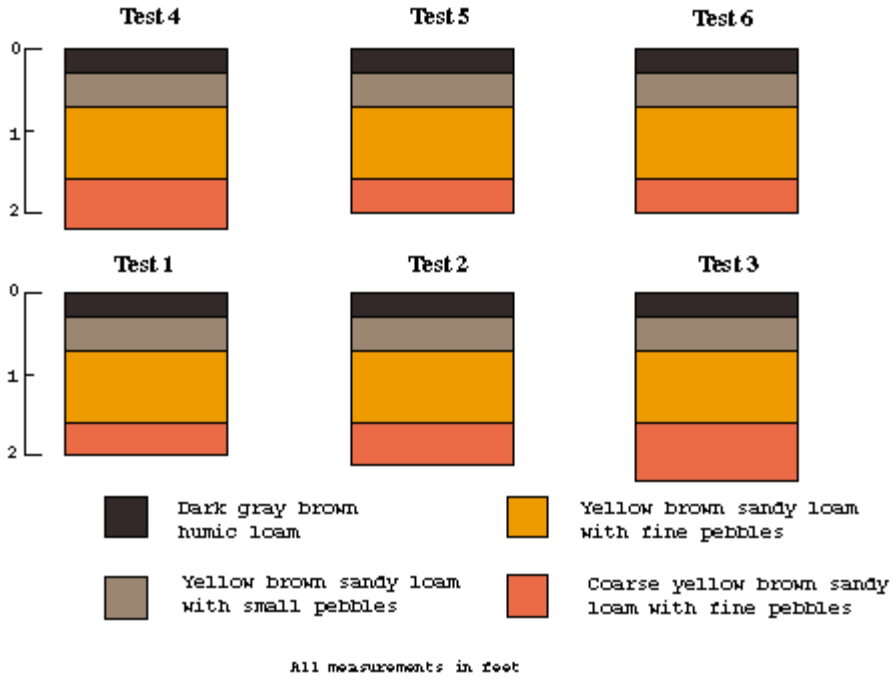

Figure 18: North profiles of archeological tests, Giorelli House.

Test 5 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam. It contained a fragment of wire.
0.3 - 0.7fbs	Yellow brown sandyloam with small (.25'<) water worn pebbles.
0.7 - 1.6fbs	Yellow brown sandy loam with fine (.1'<) water worn pebbles.
1.6 - 2.0fbs	Coarse yellow brown sandy loam with fine (.1'<) water worn pebbles.

Test 6 measured 2.0 feet in diameter and had four strata:

0 - 0.3fbs	Gray brown humic loam.
0.3 - 0.7fbs	Yellow brown sandy loam with small (.25'<) water worn pebbles.
0.7 - 1.6fbs	Yellow brown sandy loam with fine (.1'<) water worn pebbles.
1.6 - 2.0fbs	Coarse yellow brown sandy loam with fine (.1'<) water worn pebbles.

Summary: Excavation of six archeological tests within the proposed location of the drain field did not identify any archeological resources. Soil profiles were consistent with Chenango gravelly fine silt loam. The project had Ano effect@ on archeological resources.

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